

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection**

N719061025

FACILITY: VCP Michigan - Vienna 6-7		SRN / ID: N7190
LOCATION: NW NE SW SEC 7, VIENNA TWP		DISTRICT: Cadillac
CITY: VIENNA TWP		COUNTY: MONTMORENCY
CONTACT: Thomas Darden , President		ACTIVITY DATE: 12/01/2021
STAFF: Rob Dickman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection of this opt out source.		
RESOLVED COMPLAINTS:		

The VCP Michigan, LLC, Vienna 6-7, is a natural gas central processing facility (CPF) located in North Chester Township, Otsego County. At this facility, sweet natural gas from low-pressure Antrim formation wells flow to the facility via buried flowlines. Upon reaching the facility, the gas is compressed and directed through a triethylene glycol dehydrator for moisture removal. Following dehydration, natural gas is directed to a sales pipeline.

I performed an inspection on this source with respect to Permit to Install (PTI) numbers 226-02B and 165-20. PTI 226-02B was issued in May of 2018. VCP received PTI 165-20 in January of 2021. The intent of this PTI was to allow VCP to change out the engine detailed in PTI 226-02B. This engine change out was performed on February 23, 2021.

The inspection consists of an onsite inspection of equipment and a review of records required by the PTI's. The onsite inspection was performed on December 1, 2021. Required records for the facility were requested on November 1, 2021 and received on November 24, 2021. The period of time requested for these records was September 2020 through August of 2021. Required records are split between the engines covered by each PTI. Following are findings of this inspection:

Upon arrival on site, no odors were noted downwind and no visible emissions from any point were noted. The facility appeared in full operation. An inventory of pertinent equipment at the facility was as follows:

- Caterpillar model G3408 NA engine with no catalytic emission control
 - Unit Number – 102259
 - RPM – 1376
 - Oil Pressure – 73 psi
 - Water temperature – 197 F
- Glycol dehydrator, this unit is exempt from permitting per R 336.1288(2)(b)(ii)
- One 400 bbl capacity and one 200 bbl capacity above ground storage tanks. These tanks are exempt from permitting under R 336.1284(2)(e)

Permit to Install 226-02B:

Nitrogen Oxides (NOx) emissions from the engine are limited to 46.6 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. Compliance with these limits is through recordkeeping and emissions calculations. Records provided by the facility indicate 0.011 tons of NOx for the month of February 2021 and 0.185 tons per year based on a 12-month rolling time period.

Carbon Monoxide (CO) emissions from the engine are limited to 50.1 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. Compliance with these limits is through recordkeeping and emissions calculations. Records provided by the facility indicate 0.043 tons of CO for the month of February 2021 and 0.706 tons per year based on a 12-month rolling time period..

Operation of the engine while bypassing the catalytic control is limited to 200 hours per year based on a 12-month rolling time period. This engine had never been inspected prior to it's replacement, however, VCP indicated that it did have catalytic control. Records provided by the facility indicate no time when the catalyst was bypassed.

The engine was only equipped to burn natural gas. Also, as required, it was equipped with a device to measure the amount of natural gas being used for fuel. Records of fuel usage provided by the facility indicate 0.762 million cubic feet consumed for February 2021 and 12.55 million cubic feet per year based on a 12-month rolling time period as determined at the end of each month.

No stack testing has been required to be performed at this facility in the last 12 months and is currently not recommended. Calculated emissions are well below emission limitations and there is no reason to suspect otherwise.

Records of maintenance activities at this facility are being kept. These records are attached to this report.

The exhaust stack for the engine is to have a maximum diameter of 8 inches and a minimum height above ground of at least 46 feet. The stack currently in place appears to meet these parameters.

The engine is to comply with the provisions of 40 CFR 63, Subpart ZZZZ. By complying with the provisions listed in the PTI, the engine is in compliance with the MACT.

Permit to Install 165-20:

NOx emissions from the engine are limited to 63.2 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. Compliance with these limits is through recordkeeping and emissions calculations. Records provided by the facility indicate 20.805 tons of NOx as of August 2021.

The engine is only equipped to burn natural gas. Also, as required, it is equipped with a device to measure the amount of natural gas being used for fuel. Records of fuel usage provided by the facility indicate 0.885 million cubic feet used for August of 2021 and 5.818 million cubic feet consumed since engine start up.

VCP is required to develop and implement a Malfunction Abatement Plan (MAP) for the engine. This plan was submitted in March of 2021 and approved in April of 2021.

Operation of the engine while bypassing the catalytic control is limited to 200 hours per year based on a 12-month rolling time period. This engine does not have catalytic control; therefore, this condition of their permit is not applicable.

No stack testing has been required to be performed at this facility in the last 12 months and is currently not recommended. Calculated emissions are well below emission limitations and there is no reason to suspect otherwise.

Records of maintenance activities at this facility are being kept. These records are included with this reporting

VCP is allowed to swap out this engine for a equal or lesser emitting engine. The facility must notify the agency if the engine has been swapped out. No such notification has been received. The engine appears to be the engine described in the current PTI.

The exhaust stack for the engine is to have a maximum diameter of 8 inches and a minimum height above ground of at least 45 feet. This stack appears to meet these parameters

The engine is to comply with the provisions of 40 CFR 63, Subpart ZZZZ. By complying with the provisions listed in the PTI, the engine is in compliance with the MACT.

At the time of this inspection, this facility was in compliance with their air permitting.

NAME Real Dickman

DATE _____

SUPERVISOR _____